

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A metal halide lamp comprising a discharge vessel surrounded by an outer envelope with clearance and having a ceramic wall which encloses a discharge space filled with a filling comprising an inert gas including xenon (Xe), and an ionizable salt, wherein in said discharge space two electrodes are arranged ~~whose~~ having electrode tips have with a mutual interspacing EA so as to define a discharge path between ~~them~~ the electrode tips, wherein said ionizable salt comprises NaI, TlI, CaI₂ and X-iodide, wherein X comprises rare earth metals including Nd, and wherein a molar percentage ratio X-iodide/(NaI+TlI+CaI₂+X-iodide) is between 0.5% and 3%.

2. (Previously Presented) The metal halide lamp according to claim 1, wherein X is one or more elements selected from the group comprising Sc, Y, La, Ce, Pr, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Nd.

3. (Currently Amended) The metal halide lamp according to claim 1, wherein X is one or more elements selected from the group ~~comprising~~ consisting of Ce, Pr, Nd.

Claim 4 (Canceled)

5. (Previously Presented) The metal halide lamp according to claim 1, wherein the molar percentage ratio $\text{CaI}_2 / (\text{NaI} + \text{TlI} + \text{CaI}_2 + \text{X-iodide})$ lies between 10 and 95%.

6. (Previously Presented) The metal halide lamp according to claim 1, wherein the amount of NaI, TlI, CaI_2 and X-iodide lies between 0.001 and 0.5 g/cm³.

7. (Previously Presented) The metal halide lamp according to

claim 1, emitting light during stable nominal operation having a color temperature T_c above 3500K, wherein the filling of the discharge space also comprises a halide selected from Mn and In.

8. (Previously Presented) The metal halide lamp according to claim 1, wherein the filling comprises Hg.

9. (Previously Presented) The metal halide lamp according to claim 1, wherein the lamp has wall load when in stable operation at rated power of at least 30 W/cm².

10. (Currently Amended) The metal halide lamp according to claim 1, wherein at least one electrode extends inside the discharge vessel over a length forming a tip to bottom distance (t-b) between the discharge vessel wall and the electrode tip and which the tip to bottom distance (t-b) is greater than 4.0 mm and at most 4.5 mm.

11. (Previously Presented) The metal halide lamp according to

claim 1, wherein the discharge vessel has a rectangular cross section along the discharge path and wherein the tip to bottom distance (t-b) is at most 3.5 mm.

12. (Previously Presented) The metal halide lamp according to claim 1, wherein the filling of the discharge space is free of Cs.

13. (Previously Presented) The metal halide lamp of claim 1 to be used in a vehicle headlamp.

14. (Currently Amended) A method for manufacturing a vehicle headlamp, said method comprising the acts of:

providing the vehicle headlamp with a metal halide lamp comprising a discharge vessel;

surrounding said discharge vessel with an outer envelope with clearance and having a ceramic wall which encloses a discharge space;

filling said discharge space with a filling comprising an inert gas including xenon (Xe), and an ionizable salt; and

arranging in said discharge space two electrodes ~~whose having~~
electrodes tips have with a mutual interspacing EA so as to define
a discharge path between ~~them~~ the electrodes tips;

wherein said ionizable salt comprises NaI, TlI, CaI₂ and X-
iodide, wherein X comprises rare earth metals including Nd, and
wherein a molar percentage ratio X-iodide/(NaI+TlI+CaI₂+X-iodide)
is between 0.5% and 3%.

15.(New) The metal halide lamp of claim 1, wherein the
filling is mercury-free.

16.(New) The metal halide lamp of claim 1, wherein a ratio
between the mutual interspacing EA between the electrode tips and
an internal diameter Di of the discharge vessel $EA/Di=3.1$.

17.(New) The metal halide lamp of claim 1, wherein the mutual
interspacing EA is substantially 4 mm, and an internal diameter Di
of the discharge vessel is substantially 1.3 mm.

18.(New) The method of claim 14, wherein X is one or more elements selected from the group comprising consisting of Ce, Pr, Nd, and wherein at least one electrode of said two electrodes extends inside the discharge vessel over a length forming a tip to bottom distance (t-b) between the discharge vessel wall and the electrode tip, the tip to bottom distance (t-b) being greater than 4.0 mm and at most 4.5 mm.

19.(New) The method of claim 14, wherein the filling is mercury-free.

20.(New) The method of claim 14, wherein a ratio between the mutual interspacing EA between the electrode tips and an internal diameter Di of the discharge vessel $EA/Di=3.1$.